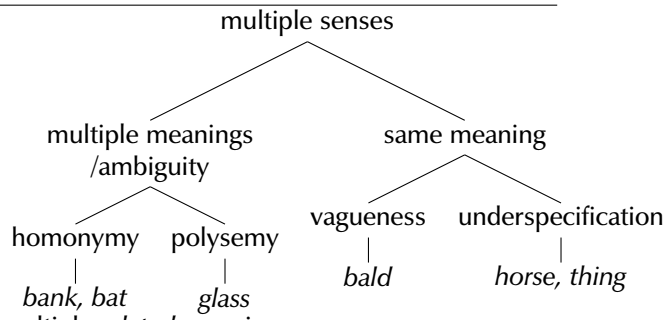
sidebar: multiple meanings

Semantics 3, UCLA Linguistics

Spring 2022



1 multiple meanings

- **synonymy**: *couch* and *sofa*? *napkin* and *serviette*?
- **homophony** (e.g. *prints, prince*)
- words with multiple meanings (**ambiguity**)
  - **homonymy** (e.g. *bank, bat*)
  - **polysemy**: a term generally reserved for words with multiple *related* meanings
    - object/concept: *Jeeves and the Feudal Spirit*; producer/product: *Dickens*
    - object/organization polysemy: *the newspaper*; location/government polysemy: *Germany*
    - place-for-event polysemy: *Vietnam*
    - "deferred reference":

      (1) a. The hamburger over on Table 5 wants his check.
      b. John is parked across the street.

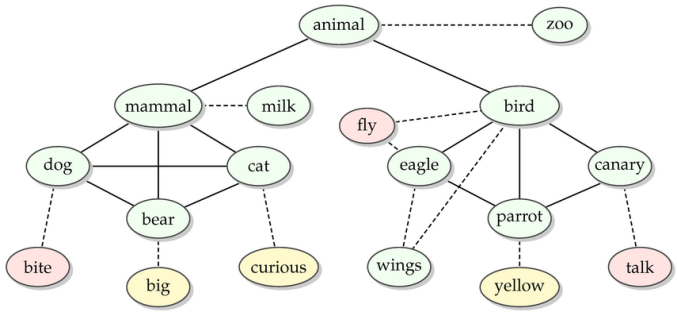
- how can we tell the difference between homonymy and polysemy?
  - cross-linguistic variation
  - etymologies
  - language acquisition
  - language processing studies
    - ambiguous words (e.g. *bank*) show a processing penalty relative to unambiguous words
    - biased lexically ambiguous words (e.g. *crook*) do not
    - polysemous words have less of a penalty than ambiguous ones (but this is true of only some types of polysemy, e.g. *Dickens* and *Vietnam* but not object/concept like *the article*)
  - brain imaging using Magnetoencephalography (MEG, see below)

SIDEBAR: THE PROBLEM OF VAGUENESS

- an aside: the problem of vagueness usually isn't associated with words like *horse*
- it's usually associated with the words *heap* or *bald*
- other guises: the Sorites paradox, the paradox of the heap
- two true premises, one false conclusion
  1. **true**: Homer Simpson is bald.
  2. **true**: There is no number of hairs n such that the change from n to $n+1$ hairs can change your baldness status
  3. **false**: Therefore, if we were to glue hairs on Homer's head, one by one, at no point would he cease to look bald

2 the semantic network

- some experimental evidence for the mental lexicon... and how it's organized!
- semantic priming experiments test for semantic relatedness by monitoring processing times
  - lexical decision task: words are flashed on a screen and subjects are asked to press buttons labelling them as words or non-words
  - this task is really used to test lexical processing times
  - stimuli:
    - [prime] (e.g. *nurse*)
      *short pause**
    - [target] (e.g. *doctor* **or** *hedgehog*)
  - semantically related targets (e.g. *doctor*) are processed more quickly (are associated with quicker response times) than semantically unrelated targets (e.g. *hedgehog*)
  - two other, possibly related, priming effects:
    - form priming: priming based on morphologic or orthographic similarity (e.g. *mature – nature*)
    - associative priming or context priming: a word primes a target because the two tend to occur in the same context (regardless of their semantic relatedness)
- brain imaging: MEG studies
  - M350: magnetic amplitude in left temporal cortex, flashes 300-400 ms after presentation of words
  - stimuli:
    - river **short pause**
    - bank **short pause**
    - savings bank **or** salty dish
  - having just seen a homonym slows you down (355 vs 334ms): "phonological inhibition"
  - what happens with polysemy (e.g. *lined paper*/*liberal paper*)?



- aphasia and the semantic network
  - **aphasia**: inability to comprehend or formulate language due to damage to specific brain regions
  - a subtype of aphasia: **anomia**
  - category-specific anomia (Nickels, 2014, *Spoken Word Production and Its Breakdown In Aphasia*)
    - some patients more impaired at naming fruits and vegetables than other objects
    - the patients could still describe properties of fruits and vegetables pictured
    - and they could still read words like *apple cart*!
    - some other patients had problems with hardware, etc.

Credit where credit is due:
This discussion comes from Chapter 3 of *Meaning: A slim guide to semantics*, by Paul Elbourne (Oxford 2011)